



Photograph of canyon from site visit

Community suggestions, from 10/08/16 meeting, for me to think about while conceptualizing the art;

- •Beautiful canyon
- Kites
- Coyote
- Vernal pools
- Native species
- Biotech
- •Concerns about light pollution



Preliminary Artwork Proposal

# Feedback from PAC 2017

- •Lighting and how the artwork will perform at night
- •Materials consider what options will perform best and age best over time
- •Landscaping how tree growth might impact future visibility

Susan Zoccola City of San Diego Fire Station No. 50 Final Artwork Proposal February 2019

Design team and PAC feedback 2017



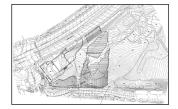
Feedback and suggestions from PAC 2019

- Consider ways the colors in the piece complement each other.
- Given that the tubular elements represent the water course, could the patina color be on the bluer side of blue/green?
- Consider the potential for color-shift in "storytelling".
- The committee was taken by the scale with respect to the architecture, and very much liked the binary juxtaposition of the materials.
- Confirm that piece integrates with adjacent landscaping / does not clash with landscaped elements.

# VISUALIZATION - AERIAL could finis wall hold ghis where could be parsen up - ... not integrates into sully SAFDIE RABINES ARCHITECTS Spend puid V SAN DIEGO FIRE-RESCUE DEPARTMENT FIRE STATION 50 | UNIVERSITY CITY, CA 12



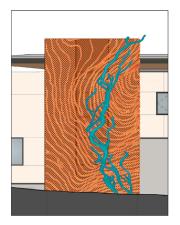




## CONCEPT:

This final artwork proposal has been inspired by my visit to Rose Canyon, community meetings, ride-alongs with the fire department, and input from the design team and Public Art Committee. When visiting with the fire fighters, I noted the complicated maps they must use to figure out routes around the canyons of San Diego, so the topography became really interesting to me. The visual references I'm using here are the topography of Rose Canyon, which the station is sited above, and the flowing water (current and old) of Rose Creek. The proposed sculpture is sited on the north elevation of the new station, facing Nobel Drive, an iconic location which will engage and welcome cars, pedestrians, and bicyclists. The artwork would use warm organic materials, in keeping with the natural beauty of the Canyon. The panels and lines of "water" would come out 3 dimensionally from the face of the building, and so visible from multiple angles. With the addition of lights, the art will be welcoming in the evening, supporting the community and station staff, also reflecting the 24/7 occupancy of the building.





Susan Zoccola City of San Diego Fire Station No. 50 Final Artwork Proposal February 2019

As illustrated in this package, I am proposing a multi-component sculpture to be installed on the concrete column wall on the north face of the building. The sculpture would be approximately 26' (h) x 16' (w) x 4' (d) and made with a variety of metals – steel, aluminum and/or copper. The art would be integrated into an engineered steel structure fabricated to anchor into the concrete panels after construction is complete. The "topo" imagery would be created with perforated metal layers, and the "water" elements would be fabricated out of metal that would be bent in curvilinear shapes and colored in blues (patinas or paints). Lighting will be designed to wash the concrete wall at night, creating a glow which will silhouette the topo panels, as well as lights from the ground aiming up which will accentuate the 'water' element. The lighting will be designed so that it is subtle and would not create more light than landscape lighting around the building. I have worked closely with the City and design team to make sure the artwork will be fabricated with durability and ease of maintenance in mind. See "Fabrication and Installation" plans for more details.

Concept and Form

#### **FABRICATION PLAN**

Fabricator: Kevin Maag, Metal Arts Foundry, Lehi, Utah 790 W State Rd, Lehi, UT 84043

Note: The supporting framework, 'topo' screen and 'water' will be fabricated in the shop as 2 monolithic units (approx. 16' x 30'), that will be lifted by crane and installed on the templated pre-drilled bolts. Description of the elements making up these 2 monolithic units:

#### FRAMEWORK:

Made with stainless steel, and will attach flush to the wall onto the pre-drilled bolts. The 4 perimeter edges will be made of angle metal (4"x4") with a matrix of steel flatbar (4" x 1/4") to support the stand-offs for the 'topo' and 'water'. There will be no framework over the windows, so that the view of the artwork will not be blocked from the inside. There will be horizontal members directly over the building mullions to provide center support. If necessary, the framework and standoffs will be primed and painted to match the concrete, but the framework will not be visible from the sides after the perforated edge panels are installed (these are to contain the light and to add security). The framework will run the entire perimeter of the artwork and frame the windows.

The Contractor will be provided a template prior to installation to enable them to install 1/2" bolts at template locations on the wall, which will correspond with the attachment locations on the sculpture framework. The exact size and location of the bolts will be determined by engineering, but at this writing we estimate them to be every 4 feet on grid (except the windows). The framework will have stainless steel rod or tube stand-off's welded to it which will attach to the 'topo' and 'water' elements, as needed to provide relief from face of building. All screws used on project will be stainless.

#### TOPO SCREEN:

The "topo" screen element will be made with a single layer of 1/4"-3/16" perforated aluminum with water/lasercut metal "topo lines" welded on top (making 2 layers). Alternately, we could create a digital file that would laser cut the topo lines and perforations much like the illustrations I've provided (see Corten etc.). I think this latter method would allow us to create a more dynamic cut "drawing", but see that 2 layers of material could also provide an interesting depth. There will be an aluminum frame around the perimeter of the perforated metal to strengthen and stiffen it. We plan for this frame to be as min imal as possible, so that it would be minimally visible at night when the lights are on, and would function as more of a 'clean line' when the screen is seen from the side during the day. If the frame were steel and the panel was aluminum, we would coat each appropriately on all sides so that there was not material galvanic reaction. The perforated metal material will probably be aluminum, as it is light. This issue of stainless vs. aluminum will be addressed with the art conservator as well. The aluminum would be treated with an 'emblazoning' acrylic patina (heat treated to fuse with metal) so that it would appear to be an irregular, organic warm bronze color.

The 2'x8' or 4'x8' perf screen panels will be spot welded together. The 'topo' panels will be attached to the framework in the shop and arrive as two monolithic units (8'x28') to be attached to the bolts on the concrete wall. The 'topo' will sit away from the angle metal frame (which is flush to the wall) via stand-off tubes so that it will be 8"-12" away from the face of the wall. Btw: This will enable the windows to be washed, and provide space for lighting and space for more light to enter the windows for people inside.

WATER SCULPTURE: The 3D 'water' unit will be made with bent aluminum sheet and rods. The 3/16" +/- sheet would be cut into curving lines that would be hand forged and bent to create the moving, "aqueous" lines. The ½" +/- rods would be hand shaped to create the water interpretation by the artist. The 'water' will be made with many pieces, so that it can be interesting and visible when approaching the building from all directions. The multiple strips and rods will have an armature or system that unifies them into one unit, which will ultimately be attached to one of the two monolithic units to be installed by Contractor. This 'water' will be coated with layers of blue-hued emblazoned (heat fixed pigment) metal. There will be a clear coat applied after the color for maintenance and UV stability on all surfaces, as needed.

Estimate of weight of overall piece: 4000 lbs.

Susan Zoccola City of San Diego Fire Station No. 50 Final Artwork Proposal March 2019 **Fabrication** 

#### TRANSPORTATION PLAN:

1 Truck in 2 pieces: Frame, 'topo' panels, 'water' will arrive as 2 units. Artist's team will be in contact with Contractor and City to determine exact time of delivery.

## **INSTALLATION PLAN:**

Template: Contractor will be provided a template for pre-drilling 1/2" threaded rod bolts into the concrete wall. The bolt pattern will be replicated identically in the shop to match the artwork frame holes. To be confirmed/designed by engineering (which will determine depth, size, quantity), these studs will most likely be placed approx. every 4 feet on the perimeter and similar around the windows. The bolts will stick out from the face of the wall 2-3" (determined by engineering) so they can receive the holes on the framework/topo/water units and will get attached to the framework with nuts as needed.

Art installation: The 2 monolithic units will be lifted off the truck with a crane and be bolted to the wall. We will provide pick-up points on each unit to help with the crane cable positioning. The artist and fabricator plan to be on-site to help facilitate installation.

# **MAINTENANCE PLAN:**

The finishes will all be clear-coated with a UV stable coating. The anticipated lifespan of the coatings is 40 years. If it needed to be recoated, the fabricator could be consulted. After completion of the project, all material data sheets and sourcing will be shared to be on file. The proprietary "emblazing" coating done by Metal Arts Foundry has been used on bronze, aluminum, mild steel, and stainless in a wide variety of climates nationwide over the past 20 years. They say they have not had to touch up any project (out of 100+) due to age/deterioration, only an accidental damage incident, which required on-site touch-up. The coating is very easy to touch-up, and a kit could be provided to the City for small touch-up, if that was desired. A re-do of the clearcoat might be advisable every 10-15 years. We recommend low-pressure washing if dust or debris accumulates on the surface.

#### TRANSPORTATION PLAN:

1 Truck in 2 pieces: Frame, 'topo' panels, 'water' will arrive as 2 units. Artist's team will be in contact with Contractor and City to determine exact time of delivery.

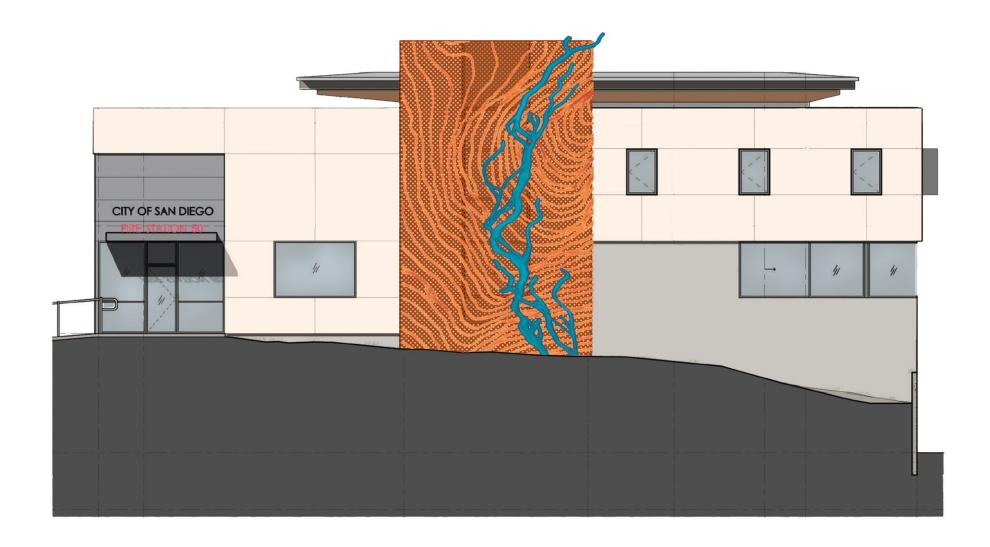
## **INSTALLATION PLAN:**

Template: Contractor will be provided a template for pre-drilling 1/2" threaded rod bolts into the concrete wall. The bolt pattern will be replicated identically in the shop to match the artwork frame holes. To be confirmed/designed by engineering (which will determine depth, size, quantity), these studs will most likely be placed approx. every 4 feet on the perimeter and similar around the windows. The bolts will stick out from the face of the wall 2-3" (determined by engineering) so they can receive the holes on the framework/topo/water units and will get attached to the framework with nuts as needed.

Art installation: The 2 monolithic units will be lifted off the truck with a crane and be bolted to the wall. We will provide pick-up points on each unit to help with the crane cable positioning. The artist and fabricator plan to be on-site to help facilitate installation.

# **MAINTENANCE PLAN:**

The finishes will all be clear-coated with a UV stable coating. The anticipated lifespan of the coatings is 40 years. If it needed to be recoated, the fabricator could be consulted. After completion of the project, all material data sheets and sourcing will be shared to be on file. The proprietary "emblazing" coating done by Metal Arts Foundry has been used on bronze, aluminum, mild steel, and stainless in a wide variety of climates nationwide over the past 20 years. They say they have not had to touch up any project (out of 100+) due to age/deterioration, only an accidental damage incident, which required on-site touch-up. The coating is very easy to touch-up, and a kit could be provided to the City for small touch-up, if that was desired. A re-do of the clearcoat might be advisable every 10-15 years. We recommend low-pressure washing if dust or debris accumulates on the surface.



Day view from Nobel Drive

#### **FABRICATION PLAN**

Fabricator: Kevin Maag, Metal Arts Foundry, Lehi, Utah 790 W State Rd, Lehi, UT 84043

Note: The supporting framework, 'topo' screen and 'water' will be fabricated in the shop as 2 monolithic units (approx. 16' x 30'), that will be lifted by crane and installed on the templated pre-drilled bolts. Description of the elements making up these 2 monolithic units:

#### FRAMEWORK:

Made with stainless steel, and will attach flush to the wall onto the pre-drilled bolts. The 4 perimeter edges will be made of angle metal (4"x4") with a matrix of steel flatbar (4" x 1/4") to support the stand-offs for the 'topo' and 'water'. There will be no framework over the windows, so that the view of the artwork will not be blocked from the inside. There will be horizontal members directly over the building mullions to provide center support. If necessary, the framework and standoffs will be primed and painted to match the concrete, but the framework will not be visible from the sides after the perforated edge panels are installed (these are to contain the light and to add security). The framework will run the entire perimeter of the artwork and frame the windows.

The Contractor will be provided a template prior to installation to enable them to install 1/2" bolts at template locations on the wall, which will correspond with the attachment locations on the sculpture framework. The exact size and location of the bolts will be determined by engineering, but at this writing we estimate them to be every 4 feet on grid (except the windows). The framework will have stainless steel rod or tube stand-off's welded to it which will attach to the 'topo' and 'water' elements, as needed to provide relief from face of building. All screws used on project will be stainless.

#### TOPO SCREEN:

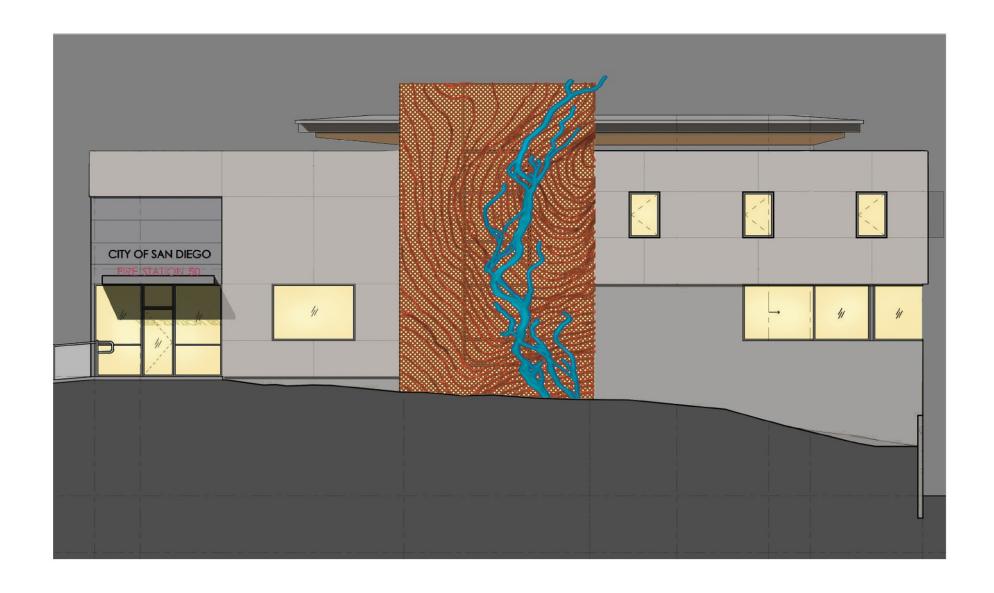
The "topo" screen element will be made with a single layer of 1/4"-3/16" perforated aluminum with water/lasercut metal "topo lines" welded on top (making 2 layers). Alternately, we could create a digital file that would laser cut the topo lines and perforations much like the illustrations I've provided (see Corten etc.). I think this latter method would allow us to create a more dynamic cut "drawing", but see that 2 layers of material could also provide an interesting depth. There will be an aluminum frame around the perimeter of the perforated metal to strengthen and stiffen it. We plan for this frame to be as min imal as possible, so that it would be minimally visible at night when the lights are on, and would function as more of a 'clean line' when the screen is seen from the side during the day. If the frame were steel and the panel was aluminum, we would coat each appropriately on all sides so that there was not material galvanic reaction. The perforated metal material will probably be aluminum, as it is light. This issue of stainless vs. aluminum will be addressed with the art conservator as well. The aluminum would be treated with an 'emblazoning' acrylic patina (heat treated to fuse with metal) so that it would appear to be an irregular, organic warm bronze color.

The 2'x8' or 4'x8' perf screen panels will be spot welded together. The 'topo' panels will be attached to the framework in the shop and arrive as two monolithic units (8'x28') to be attached to the bolts on the concrete wall. The 'topo' will sit away from the angle metal frame (which is flush to the wall) via stand-off tubes so that it will be 8"-12" away from the face of the wall. Btw: This will enable the windows to be washed, and provide space for lighting and space for more light to enter the windows for people inside.

WATER SCULPTURE: The 3D 'water' unit will be made with bent aluminum sheet and rods. The 3/16" +/- sheet would be cut into curving lines that would be hand forged and bent to create the moving, "aqueous" lines. The ½" +/- rods would be hand shaped to create the water interpretation by the artist. The 'water' will be made with many pieces, so that it can be interesting and visible when approaching the building from all directions. The multiple strips and rods will have an armature or system that unifies them into one unit, which will ultimately be attached to one of the two monolithic units to be installed by Contractor. This 'water' will be coated with layers of blue-hued emblazoned (heat fixed pigment) metal. There will be a clear coat applied after the color for maintenance and UV stability on all surfaces, as needed.

Estimate of weight of overall piece: 4000 lbs.

Susan Zoccola City of San Diego Fire Station No. 50 Final Artwork Proposal March 2019 **Fabrication** 

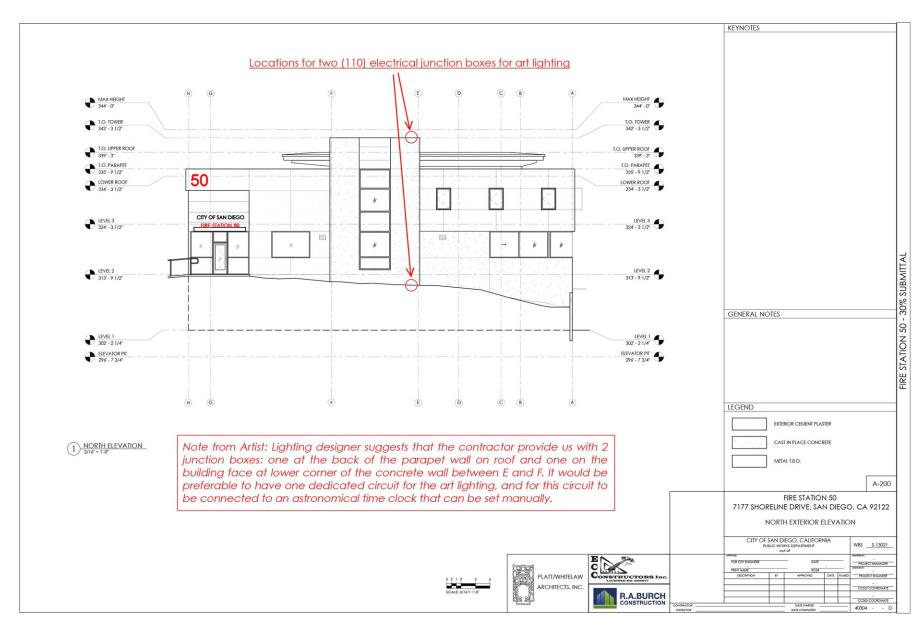




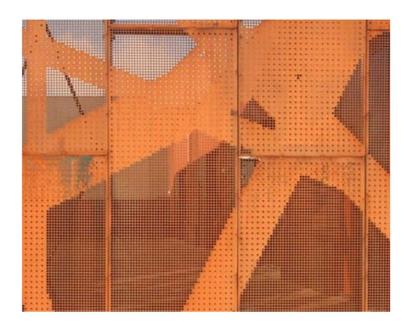


City of San Diego Fire Station No. 50 Final Artwork Proposal February 2019

View west from entrance



Lighting infrastructure plan





Perforated Corten Steel option for topo panel



Perforated "Dirty Penny Copper" (Zahner Co) option for topo panel



Perforated Copper option for topo panel

Material concepts for topo panel







Waterjet cut metal



Verdigris color concepts



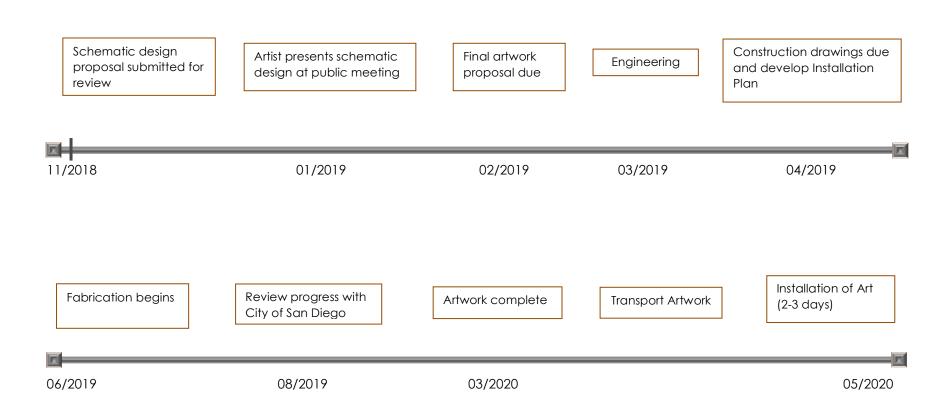






Susan Zoccola City of San Diego Fire Station No. 50 Final Artwork Proposal February 2019

# PRELIMINARY TIMELINE



# FINAL BUDGET

ARTIST FEES	
Concept development	\$ 10,000.
Final Design Development & documentation for fabrication	\$ 15,000.
Fabrication oversight and travel	\$ 5,000.
Travel– 2 visits to San Diego for meetings	\$ 2,000.
Installation oversight and travel	\$ 3,000.
PROJECT EXPENSES	
Engineering	\$ 4,000.
Conservator review	\$ 1,000.
Development Service Permit review	\$ 1,000.
Lighting Design	\$ 3,000.
Lighting fixtures	\$ 7,000.
Insurance	\$ 3,000.
Taxes	\$ 4,000.
Contingency	\$ 15,000.
FABRICATION (to be done by Metal Arts Foundry):	
<ul> <li>Metal Fabrication</li> </ul>	\$ 56,000.
<ul><li>Coatings</li></ul>	\$ 10,000.
•Shipping to site	\$ 8,000.
<ul> <li>Fabricator oversight at installation</li> </ul>	\$ 3,000.
TOTAL BUDGET	\$150,000.